Work Order ID 98006

98006

March-01-13 1:57:41 PM

Item ID: D3303-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Plate

Start Date: 3/01/13 **Start Qty:** 4.00 *4*

Required Date: 3/14/13 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLJ **Date:** 13-03-04 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D3303	**Revision Nbr** Rev B								
100 *100* Waterjet FLOW CNC Waterjet 2024.032	FLOW WATER JET **Memo** 1-Cut as per Dwg D3303 Dwg Rev: B Prog Rev: B 2-Deburr if necessary	0.00 0.00				4			DAS 05 13.04.21
110 *110* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB **Memo**	0.00 0.00				4			DAS 05 13.04.21
120 *120* QC Quality Control	QC8- Inspect parts - second check **Memo**	0.00 0.00				4			DAS 16 13/4/22

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Item ID: D3303-1 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Plate
Start Date: 3/01/13 **Start Qty:** 4.00 *4* **Cust Item ID:**
Required Date: 3/14/13 **Req'd Qty:** 4.00 *4* **Customer:**
Reference:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00				4	16	B51	
130 HandFinish Hand Finishing	**Memo**	0.00							
140	QC3- Inspect Part Finish	0.00 DAS 27				4			
140 QC Quality Control	**Memo**	0.00 B501							
150	Identify as per dwg & Stock Location ST 185	0.00				4x			13-5-7
150 Packaging Packaging	**Memo**	0.00							

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

- ☐ Bending
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- ☐ Cuffs
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- ☐ Turning Sequence
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- ☐ Contamination
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- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Work Order ID 98006

March-01-13 1:57:42 PM

98006

Item ID: D3303-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Plate

Start Date: 3/01/13 **Start Qty:** 4.00 *4*

Required Date: 3/14/13 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	**Memo**	0.00							
Quality Control									

13/5/7 JB

JB 05-7

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
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- ☐ Cuffs
- ☐ Heat Treat
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- ☐ Ripples in Bend
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- ☐ Turning Sequence
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General

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- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
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- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

March-01-13 1:57:41 PM

Work Order ID: 98006

Parent Item: D3303-1 **Start Date:** 3/01/13 **Required Date:** 3/14/13

Parent Item Name: Plate **Start Qty:** 4.00 **Required Qty:** 4.00

Comments: IPP: A04.09.07New issueKJ/JLM
IPP Rev:B 06-06-28 Now On Waterjet JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.032 2024-T3 .032 sheet		Purchased	No			100	sf	357.8522	**0.3542**	**1.4913684**		13.04.21	

Location	Loc Qty	Loc Code	
MAT022	357.8522		
118243	32.4962		
118523	141		
121309	68.656		
123096	27.6		
123574	88.1		

12498

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
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- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

DART AEROSPACE LTD	Work Order:	98006
Description: Plate	Part Number:	D3303-1
Inspection Dwg: D3303 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [] Prototype

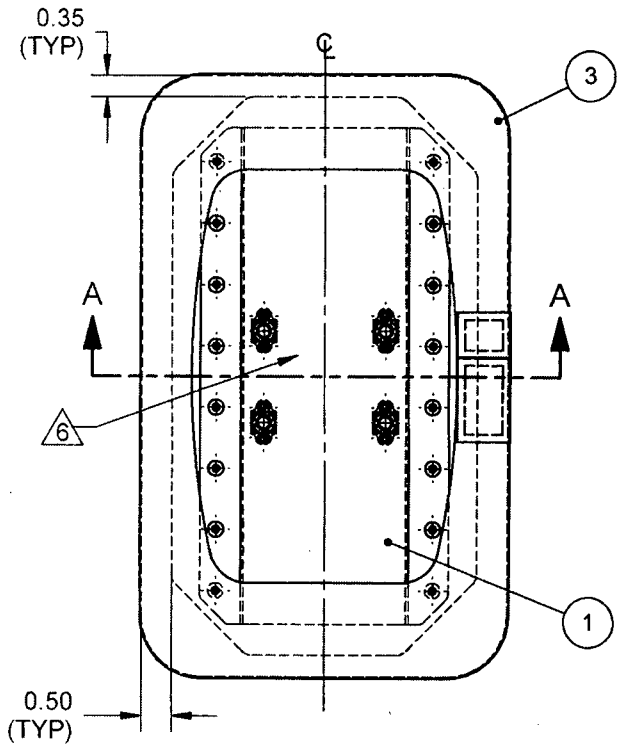
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
5.00	+/-0.030	5.00	✓		V	JKM-01
3.550	+/-0.005	3.55	✓		V	
1.22 x 45°	+/-0.030	1.22 x 45°	✓		AF	
R0.25	+/-0.030	R0.25	✓		RG	
9.10	+/-0.030	9.10	✓		T	JKM-06
7.000	+/-0.005	6.998	✓		V	
1.000	+/-0.005	1.003	✓		V	
1.050	+/-0.010	1.052	✓		V	
0.725	+/-0.010	0.727	✓		V	
0.032	+/-0.010	0.031	✓		V	
Ø0.129	+0.004/-0.001	0.130	✓		V	

Measured by:		Audited by:		Prototype Approval:	N/A
Date:	13.04.21	Date:	13/04/22	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.09.08	New Issue	KJ/JLM	
B	07.01.16	5.00 was 5.000; Ø0.129 added	KJ/JLM	

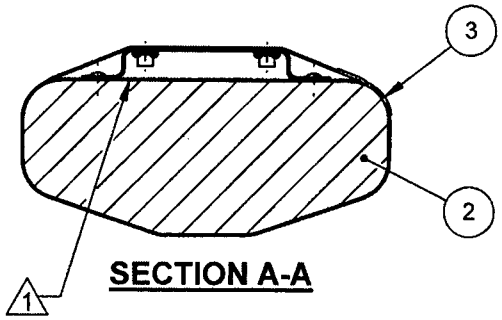
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		HAWKESBURY, ONTARIO, CANADA
CHECKED PH	APPROVED	DRAWING NO. D3303 REV. B
		SHEET 1 OF 4
DATE 06.08.17		TITLE HEAD REST SCALE 1:3

REV	DATE	DESCRIPTION
A	04.08.18	NEW ISSUE
B	06.08.17	UPDATED FLAT PATTERN TO FORM PART IN ONE OPERATION USING OFFSET DIE



RELEASED
dc 09.19

DEO ATTACHED



SECTION A-A

D3303-041 HEAD REST

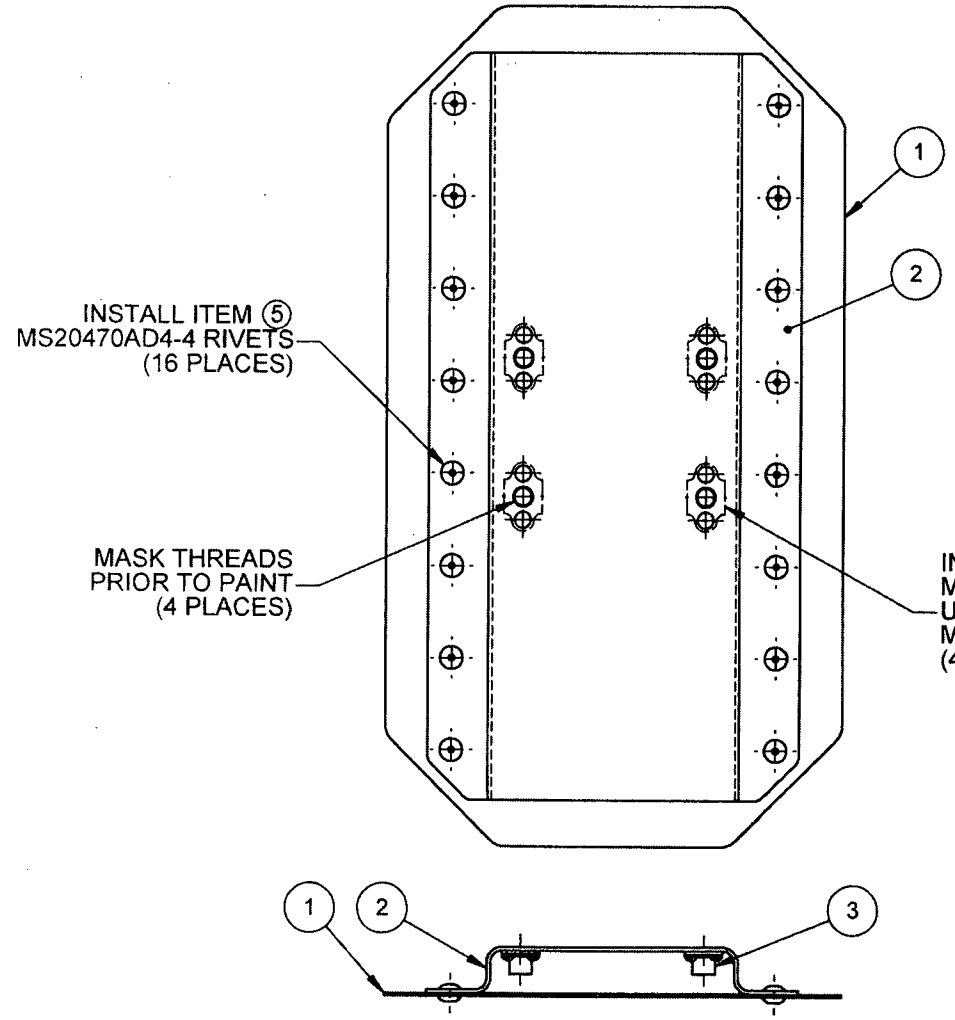
ITEM	QTY -041	P/N	DESCRIPTION
	X	D3303-041	HEAD REST
1	1	D3303-043	BRACKET ASSEMBLY
2	1	D3305-1	FOAM
3	1	D3306-041	COVER ASSEMBLY

98006 MLS
13-03-04

NOTES:
1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE (0.002" TO 0.010" THICK) IN ACORDDANCE WITH MANUFACTURER'S INSTRUCTIONS
2) COVER HEAD REST WITH D3306-041 COVER ASSEMBLY AS SHOWN
3) PART IS SYMMETRICAL AT CENTERLINE
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
6) IDENTIFY AS FOLLOWS USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD, P/N D3303-041 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

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DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED	DRAWING NO. D3303	REV. B SHEET 2 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2



DEO ATTACHED

RELEASED
06.09.19

D3303-043 BRACKET ASSEMBLY

ITEM	QTY -043	P/N	DESCRIPTION
	X	D3303-043	BRACKET ASSEMBLY
1	1	D3303-1	PLATE
2	1	D3303-3	HEAD REST
3	4	MS21075L3	NUT PLATE
4	8	MS20426AD3-3	RIVET
5	16	MS20470AD4-4	RIVET

NOTES:
1) FINISH: POWDER COAT ASSEMBLY GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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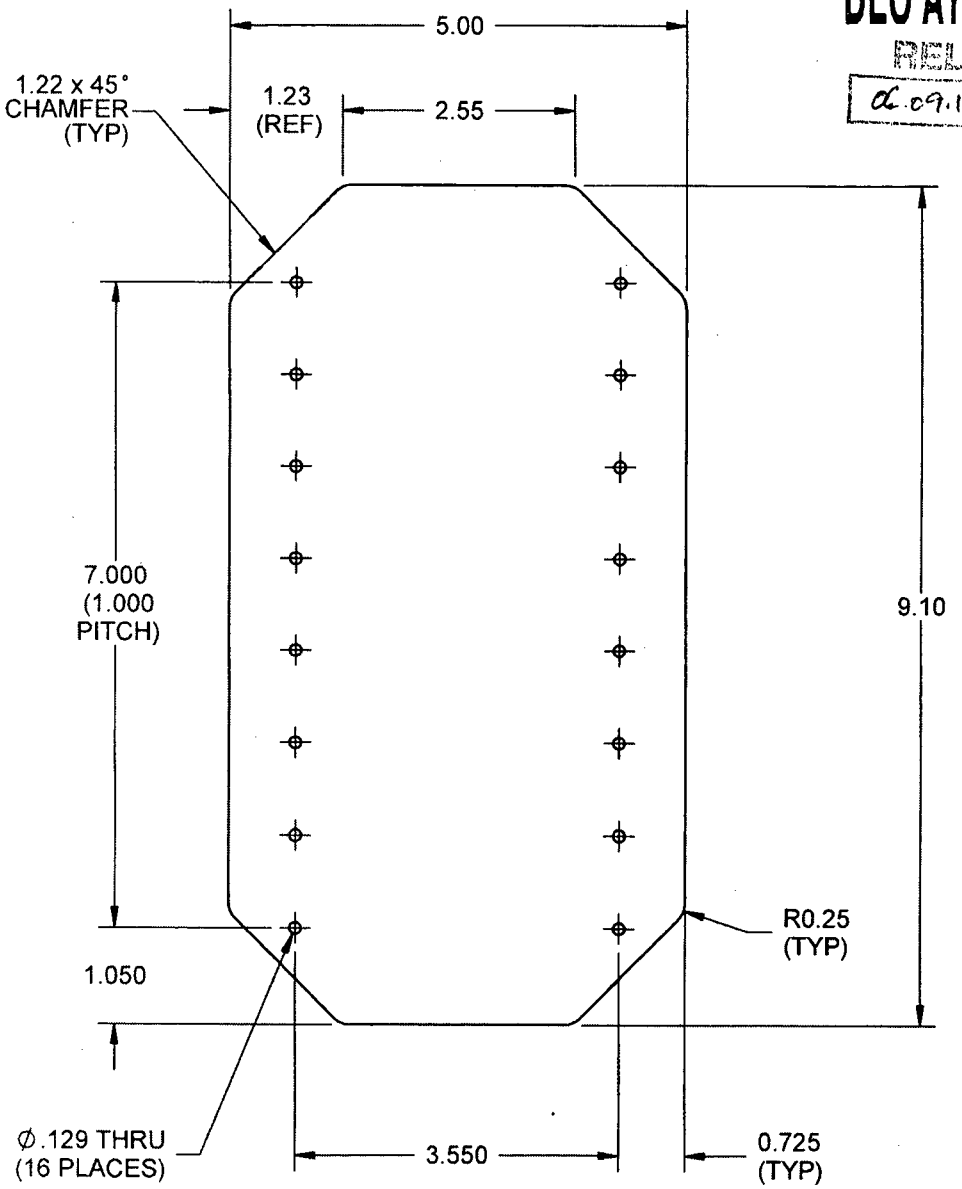
7606

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED	DRAWING NO. D3303	REV. B SHEET 3 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2

DEO ATTACHED

RELEASED

d.09.14



D3303-1 PLATE

NOTES:
1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK SHEET
(REF. DART SPEC. M2024T3S.032)
2) FINISH: CHEMICAL CONVERSION COAT AS PER DART QSI 005.4.1
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
5) BREAK ALL SHARP EDGES 0.005 TO 0.015

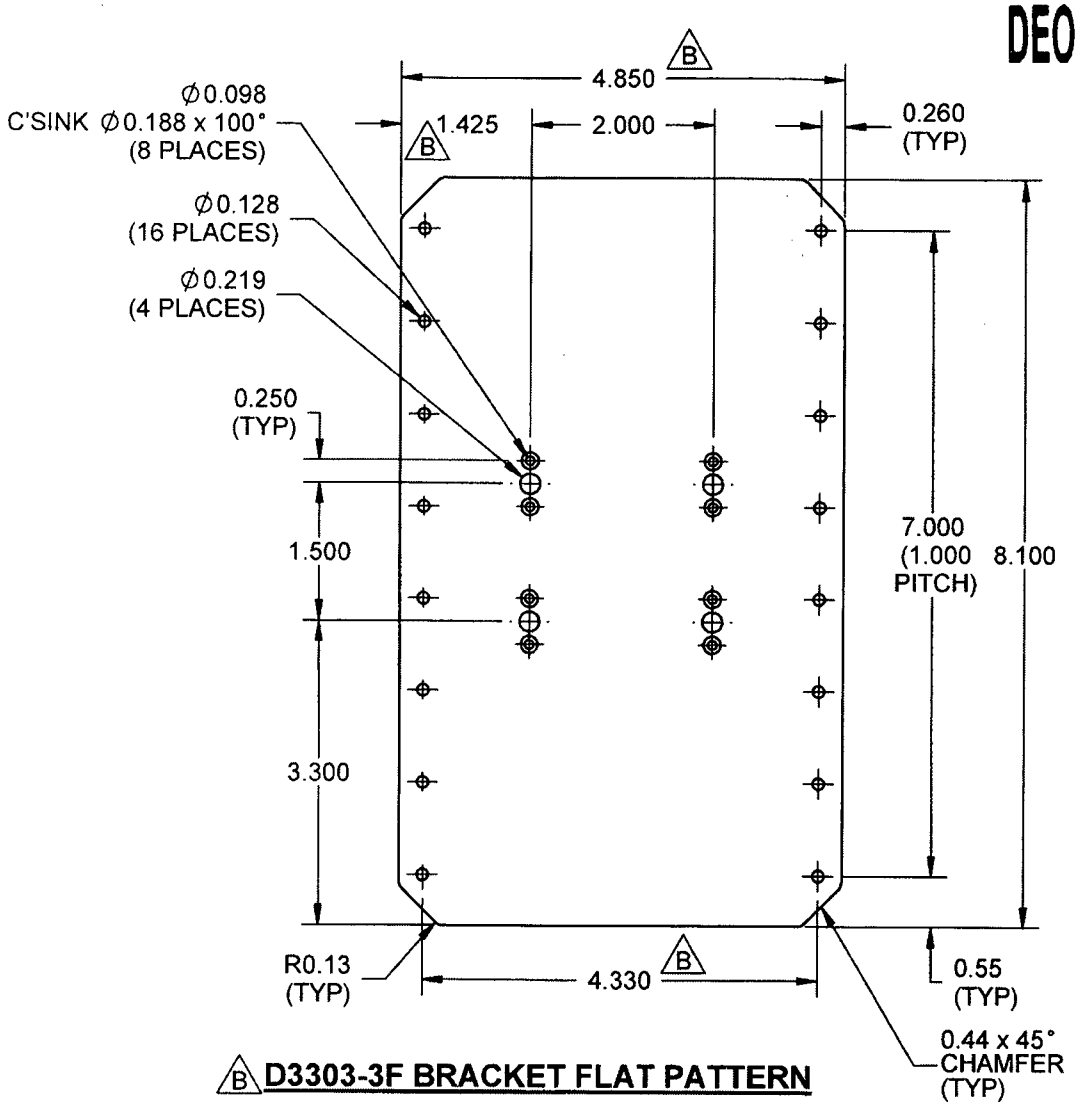
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9006

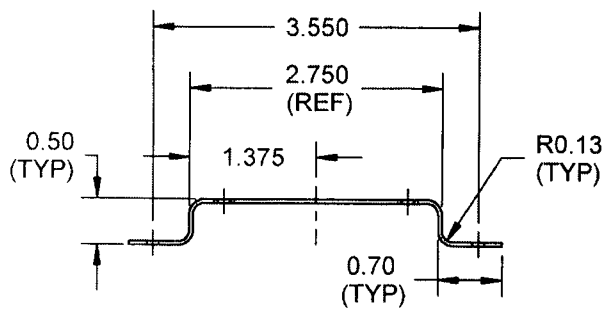
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED PH	APPROVED	DRAWING NO. D3303	REV. B SHEET 4 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2

DEO ATTACHED

RELEASED
06-09-19



B D3303-3F BRACKET FLAT PATTERN



D3303-3 BRACKET BEND DETAIL

NOTES:
1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK SHEET (REF. DART SPEC. M2024T3S.040)
2) FINISH: CHEMICAL CONVERSION COAT AS PER DART QSI 005.4.1
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
5) BREAK ALL SHARP EDGES 0.005 TO 0.015

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98006

98006

DRAWING NO.	TITLE	REV.	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO.	SHEET NO.	SCALE
D3303	HEAD REST	B		D3303-B-1	SHEET 1 OF 1	NTS

DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.
AJS				
DATE 08.10.15	DATE 08.10.15	DATE 08/10/16	DATE 08/10/16	DATE 08/10/16

SHEET 1 ADD 1300L ADHESIVE BY 3M TO NOTE 1 AS FOLLOWS:

IS:

NOTES:
1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 OR 1300L ADHESIVE (0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

WAS:

NOTES:
1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE (0.002" TO 0.010" THICK) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

SEE NCR 08-069 FOR FURTHER DETAILS

RELEASED 08/11/16

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